**BEFORE**

**THE PUBLIC SERVICE COMMISSION**

**OF**

**SOUTH CAROLINA**

**DOCKET NO. 2019-239-E – ORDER NO. 2019-__**

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| In the Matter of: | ) | **POST-HEARING BRIEF IN THE** |
| Dominion Energy South Carolina, Inc.'s | ) | **FORM OF A PROPOSED ORDER** |
| Request for Approval of an Expanded | ) | **APPROVING DOMINION ENERGY** |
| Portfolio of Demand Side Management | ) | **SOUTH CAROLINA, INC.'S** |
| Programs and a Modified Demand Side | ) | **REQUEST FOR APPROVAL OF AN** |
| Management Rate Rider | ) | **EXPANDED DEMAND SIDE** |
| | ) | **MANAGEMENT PLAN AND A** |
| | ) | **MODIFIED DEMAND SIDE** |
| | ) | **MANAGEMENT RATE RIDER** |

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## I. <u>INTRODUCTION</u>

This matter comes before the Public Service Commission of South Carolina (the "Commission") pursuant to a request made by Dominion Energy South Carolina, Inc. ("DESC" or the "Company"), under the authority of S.C. Code Ann. § 58-37-20 (2015, as amended), Commission Regulations S.C. Code Ann. Regs. 103-819 and 103-823 (2012), and in compliance with Commission Order No. 2010-472, as affirmed and modified by Order No. 2013-826, for review of DESC's proposed suite of demand side management ("DSM") programs and the modification of the annual rate rider to allow DESC recovery of costs and net lost revenue associated with its DSM programs along with an incentive for investing in such programs.

DESC filed its Application in this proceeding on June 28, 2019. Timely Petitions to Intervene were received from Walmart, Inc. ("Walmart"), the South Carolina State Conference of the NAACP ("SC NAACP"), the South Carolina Coastal Conservation League ("CCL"), and the Southern Alliance for Clean Energy ("SACE"). The South Carolina Office of Regulatory Staff ("ORS") was automatically a party to this proceeding pursuant to S.C. Code Ann. § 58-4-10(B).

On October 2, 2019, DESC prefiled the direct testimony of witnesses Therese Griffin, David Pickles, John Raftery, and Allen Rooks. On October 23, 2019, the ORS prefiled the direct testimony of George W. Evans; Walmart prefiled the direct testimony of Lisa V. Perry; and the NAACP, CCL, and SACE (the "Joint Interveners") prefiled the direct testimony of Elizabeth Chant. On October 30, 2019, witnesses Griffin, Raftery, Pickles, and Rooks prefiled rebuttal testimony, and on November 4, 2019, the Joint Interveners' witnesses Chant and Eddy Moore and ORS witness Evans prefiled surrebuttal testimony.

The hearing to consider DESC's Application was held on November 13, 2019. At the hearing, DESC was represented by K. Chad Burgess, Esquire, Matthew W. Gissendanner, Esquire, and Belton T. Zeigler, Esquire. ORS was represented by Jeffrey M. Nelson, Esquire and Jenny R. Pittman, Esquire. Walmart was represented by Stephanie U. Eaton, Esquire, and the Joint Interveners were represented by Stinson W. Ferguson, Esquire, and William C. Cleveland, Esquire.

During the hearing, all witnesses who provided pre-filed testimony also testified in person. Late Filed Hearing Exhibit 3, the Curriculum Vitae ("CV") of Elizabeth Chant, was filed November 19, 2019. The Joint Interveners also filed Late Filed Hearing Exhibit 5 on November 19, 2019, concerning measures to reduce winter peak, at the request of Commissioner Ervin during the hearing. DESC was given the opportunity to respond to Late Filed Hearing Exhibit 5 and did so by late filed exhibit on December 4, 2019. In addition, on December 4, 2019, DESC filed a motion to strike the late filed exhibit based on the scope of matters it sought to inject into the record, and the prejudice it represented to parties' due process interests. The Commission granted a motion to strike it from the record by Order No. 2019-___.

## II. **LEGAL STANDARDS**

By statute, the Commission is vested with the power and jurisdiction to supervise and regulate the rates and service of every public utility in this State and to fix just and reasonable standards, classifications, regulations, practices, and measurements of service to be furnished, imposed or observed, and followed by every public utility in this State. S.C. Code Ann. §58-3-140(A) (2015). S.C. Code Ann. § 58-37-20 authorizes the Commission to adopt procedures that encourage electrical utilities to invest in cost-effective energy efficient technologies and energy conservation programs. The statute further provides that if the Commission chooses to adopt such procedures, the procedures must:

- Provide incentives and cost recovery for electric utilities that invest in energy supply and end-use technologies that are cost effective, environmentally acceptable, and reduce energy consumption or demand;
- Allow electric utilities to recover their costs and obtain a reasonable rate of return on their investment in qualified DSM programs sufficient to make those programs at least as financially attractive as construction of new generating facilities; and
- Establish rates and charges that ensure that the net income of an electrical utility after implementation of specific cost-effective energy conservation measures is at least as high as the net income would have been if the energy conservation measures had not been implemented.

S.C. Code Ann. § 58-37-20.

## III. BASIS FOR DESC'S APPLICATION

In Order No. 2010-472, filed in Docket No. 2009-261-E, the Commission approved DESC's proposed suite of nine (9) residential and two (2) commercial and industrial DSM programs and authorized the Company to establish a rate rider to recover costs. In that order, the Commission found that DESC's "proposed suite of DSM programs represented an appropriate and reasonable approach for implementing DSM measures that are in the public interest and are consistent with S.C. Code Ann. § 58-37-20." Order No. 2010-472, p. 8.

In accordance with S.C. Code Ann. § 58-37-20, the Commission approved a rate rider allowing the Company to recover its costs, net lost revenue and an incentive to provide a reasonable rate of return on its investment in qualified DSM programs. The Commission authorized the Company to amortize the reasonable and prudent costs incurred in implementing and operating its DSM programs over a five-year period with unrecovered balances bearing carrying costs at the Company's weighted average cost of capital. Order No. 2010-472, pp. 10-11. The Commission also approved a shared savings incentive equal to 6% multiplied by the estimated net benefits of each energy efficiency program using the Utility Cost Test. Order No. 2010-472, pp. 10-13.

The Commission also ordered DESC to make annual filings with the Commission updating the Company's DSM Rate Rider each January with a review period comprising the 12 months ending each November 30$^{th}$. The Commission ordered the Company to obtain an annual review of the results achieved by its DSM programs by an independent third party, the annual Evaluation, Measurement and Validation ("EM&V") report.

In Order No. 2013-826, the Company requested, and the Commission approved, a revised suite of eleven (11) DSM programs, including nine (9) residential and two (2) commercial programs. The Commission continued the cost recovery mechanism ordered in Order No. 2010-472. Order No. 2013-826, p. 26. The Commission reaffirmed carrying costs at the Company's weighted average cost of capital. Order No. 2013-826, pp. 13-14. In annual filings from 2014 through 2019, the Commission approved updated factors for the DSM Rate Rider and modifications to the DSM programs.[1]

In both Order Nos. 2010-472 and 2013-826, the Commission granted the Company the authority to amend, modify or terminate DSM programs as circumstances indicated, with annual reporting of modifications to the Commission, and reserved the right on its own initiative to modify the terms and conditions of the DSM rate rider mechanism and associated matters at any time. However, to provide a measure of stability and predictability to DESC's DSM offerings, Order No. 2013-826 also precluded parties from filing petitions to modify DSM programs or the DSM rate recovery rider for six years from the date of the order. That six-year term expired on November 26, 2019. In anticipation of the expiration of that term, the Company filed its Application requesting approval of an expanded suite of DSM programs and the modification of the annual rate rider to allow DESC recovery of costs and net lost revenue associated with its DSM programs along with an appropriate incentive for investing in such programs. No party in this proceeding has objected to the filing of the Application as untimely.

## IV. ADVISORY GROUP AND TRADE ALLY INVOLVEMENT

In Order No. 2010-472, the Commission ordered establishment of an energy efficiency advisory group (the "Advisory Group") to "consider and make recommendations to [DESC] with respect to efficiency potential studies, new program ideas, modifications to existing programs,

[1] Order No. 2014-381 (Docket No. 2014-44-E); Order No. 2015-307 (Docket No. 2015-45-E); Order No. 2015-307 (Docket No. 2015-45-E); Order No. 2016-299 (Docket No. 2016-40-E); Order No. 2017-260 (Docket No. 2017-35-E); Order No. 2018-312 (Docket No. 2018-42-E); and Order No. 2019-292 (Docket No. 2019-57-E).

outreach and education programs and funding, and EM&V plans." Order No. 2013-826, pp. 21-22; reaffirmed in Order No. 2013-826. Presently, the Advisory Group consists of ORS and DESC, the State Energy Office of ORS, the South Carolina Office of Economic Opportunity, the South Carolina Energy Users Committee, the South Carolina Small Business Chamber of Commerce, the South Carolina Coastal Conservation League, and the Southern Alliance of Clean Energy. Tr. at 35.5. While Order Nos. 2010-472 and 2013-826 required semiannual meetings, the Advisory Group has instead met fourteen times over the last five years. Tr. at 35.5.

As Order Nos. 2010-472 and 2013-826 indicate, a robust stakeholder engagement process is especially valuable in the DSM context. It provides the opportunity for a broad range of interested parties to review and evaluate DSM program results and consider opportunities for modifications to programs in a structured setting outside of contested-case regulatory proceedings such as this. Part of the Commission's task in reviewing DSM programs and proposed modifications to them is to also review the process by which the Advisory Group was engaged in the review and consideration of programs leading up to the filing. The Commission recognizes that the positions taken and suggestions made in those deliberations are not properly considered as evidence in later proceedings. They are in the nature of privileged settlement discussions. But the process by which reviews were conducted, information was exchanged and comments were elicited is relevant to the Commission's role in reviewing the overall functioning of a utility's DSM programs. The Commission finds that the record in this proceeding provides a sufficient basis for that review.

In the present proceeding, Witness Raftery testified that "since initiating this planning process in 2017, DESC has worked consistently with its stakeholders to gain a range of input and buy-in to its proposed programs." Tr. at 18.4. Ms. Griffin likewise testified, "[f]rom the beginning of the planning process in late 2017, the Advisory Group has been engaged in reviewing, providing input and commenting on the DSM plan presented here." Tr. at 35.10. In her testimony, Ms. Griffin explained how the Advisory Group was asked in the fall of 2018 to review and comment on the scope and methodology of the Potential Study as it was being initiated. Members of ICF International, Inc. ("ICF"), which prepared the study, came to a late 2018 Advisory Group meeting to present the study design and respond to questions and comments. The Advisory Group was provided a similar opportunity to review and comment on the design and methodology of the market study prepared by Opinion Dynamics Corporation ("ODC"). The Advisory Group was provided with the draft list of measures to be evaluated in the Potential Study. They were asked to comment on it and suggest additional measures. Tr. at 35.10. Specifically, the Advisory Group was given the list of approximately 450 measures being considered for inclusion in the Potential Study for review and comment and suggestions as to additional measures to be considered. When the analytical work underlying the Potential Study was complete, the Advisory Group was convened and ICF presented the results of that analysis to the group before the report itself was drafted. In addition to the exchange of information at formal meetings, members of the Advisory Group were provided information by email between in-person meetings, and comments from them were solicited by email. *See* Hearing Ex. 6, ICF Preliminary Draft Results of SCE&G DSM Potential Study.

The work of the Advisory Group is only one part of the stakeholder process. In addition, ODC surveyed customers directly for their input. Trade allies (builders, HVAC installers and distributors and lighting contractors and distributors) were engaged to "ensure that the proposed programs will be attractive to customers and are practicable from an implementation standpoint." Tr. at 18.5; *see also*, Tr. at 35.12-35.13. Ms. Griffin testified that DESC maintains

> constant outreach with trade allies to promote our DSM programs to them. We train trade ally personnel on the proper sizing and installation of energy efficient equipment, on measures like duct sealing and insulation, and on energy efficiency measures generally. DESC distributes an email newsletter for its HVAC industry partners, holds training sessions throughout the year at HVAC distributor facilities, and broadcasts informational webinars for trade allies who support the EnergyWise for Your Business program.

Tr. at 35.12.

In their testimony, the Joint Interveners expressed concerns that the testimony regarding the Advisory Group process could be taken as implying their endorsement of the suite of programs proposed by DESC and the extent of investment by DESC in DSM activities. *See* Tr. at 171.3-171.5. The Commission affirms that any such implication would be incorrect. A party's participation in the Advisory Group process does not amount to an endorsement of the outcome of the consultative process. Ultimately, the utility must make important decisions about the practicality of specific DSM programs, their likely reception by its customers, the logistical and resource challenges that must be overcome in offering them and the acceptable size of its DSM budgets and resulting rate impacts. Those are all decisions that any interested party is free to challenge in proceedings such as these regardless of whether or not they have participated in a stakeholder process. The purpose of the Advisory Group is not to foreclose issues being raised in proceedings such as this, but to ensure that the utility has the best information available before it as it makes decisions about its DSM programs.

Based upon all evidence presented, the Commission finds that DESC took an appropriately collaborative approach to formulating its proposed suite of programs. The Advisory Group performed the functions required of it. No party's rights to challenge the DSM programs under consideration here have been cut off or prejudiced due to their participation in that process.

## V. DESC'S PROPOSED DSM PROGRAMS

### A. Proposed DSM Programs

In its Application, DESC proposed a suite of ten modified, expanded, and new DSM programs along with five-year program plans for their implementation. Per Witness Raftery, "[i]n the proposed suite of programs, DESC is essentially doubling spending and energy savings from its DSM programs for its customers." Tr. at 18.14.

Mr. Raftery explained that DESC's goals in the process were "to continue to improve its existing suite of programs, to modify programs to better reach low and moderate income and small business customer groups, and to refocus programs to reflect current realities in the DSM marketplace." Tr. at 18.4. Witness Griffin further explained that

> experience over the past eight years has shown that there are important customer groups that are not easily reached through the standard DSM communication channels principally used. For example, reaching low to moderate income customers often requires local community outreach and partnerships to raise awareness and encourage participation. A key goal of the DSM plan proposed in this proceeding is to better reach these underserved customer groups going forward. Similarly, reaching small businesses requires a direct, hands-on approach as well.

Tr. at 35.13-35.14.

To develop its revised suite of programs, DESC engaged ICF to conduct "a comprehensive potential study and DSM program analysis." Tr. at 18.9. As ICF's Senior Vice President David Pickles testified, to prepare this Potential Study, ICF analyzed 454 measure types and 1,442 measure permutations identified based on its experience implementing over 170 DSM programs in 28 states nationally. Tr. at 51.2-51.3. ICF evaluated these measures using the Total Resource Cost ("TRC") test. Tr. at 51.8. This test is used industry wide to measure program cost effectiveness.

Witness Pickles explained how the Potential Study improved upon the Company's 2009 Potential Study, testifying that it

- "better reflects the attributes of the DESC customer base, as well as the needs and capabilities of the trade ally community,"
- "includes extensive new service territory specific data,"
- "reflects significant changes to codes and standards since the 2009 study,"
- "incorporates non-energy benefits (including water and wastewater savings, natural gas savings, an avoided and deferred equipment replacement costs),"
- "reflect the fact that a significant number of DESC's largest customers have elected to opt-out of the DSM programs,"
- "reflects the increasing natural adoption of certain energy efficiency measures,"
- "updates the assumed costs of measures, reflecting the fact that the costs of some measures have changed significantly since the previous study," and
- "reflects DESC's updated capacity availability, and the resulting changes in DESC's avoided capacity and energy costs."

Tr. at 51.6.

Based upon ICF's study, which is presented in Hearing Exhibit 1, DESC proposed a suite of ten DSM programs in its Application. Of the ten programs, seven target residential customers, and three target commercial and industrial customers. As DESC's witnesses testified, the programs "focus on increasing the efficiency of existing housing and reaching underserved low and moderate income and small business customer groups." Tr. at 18.6. Collectively, over five years the programs will save 115.5 megawatts ("MW") of capacity and 498,971 megawatt hours ("MWh") of energy with a total program expenditure of $139.8 million. Tr. at 51.13-51.14. As in past proceedings, the measures that were found to be cost effective using the program level test were included in the proposed energy efficiency programs. Tr. at 51.8, 51.12. All ten energy efficiency programs proposed, including the low-income program, have been determined to be cost-effective programs under the TRC test.

Ms. Griffin testified that under the proposed program plan, all of the DSM programs currently in effect will continue with expansions and modifications and two new programs will be added. First, the Company proposes to add a Residential Multifamily program to reach rental customers by "offering highly discounted energy efficiency upgrades to property owners in exchange for building-wide participation in the program." Tr. at 35.17-35.18. Witness Griffin further testified that "[a]bout 20% of DESC's customers are rental customers living in multifamily housing, and approximately 30% of these customers are considered low-income customers. Experience has shown renters to be a difficult customer group to reach since often the person paying the utility bill is not the owner or manager of the residence." Tr. at 35.17.

Second, the Company proposes to add a Municipal LED Lighting program that targets municipalities to "encourage the replacement of older, inefficient streetlights with high-efficiency LED streetlights." Tr. at 35.28-35.29. To do so, the Company will offer incentives to "create a financially neutral option for municipalities to participate in the program by offering bill credits that will reduce the cost of the high-efficiency LED lights over a period of five years to a level equal to or less than the cost of continuing with the existing, less efficient halide lighting." Tr. at 35.28-35.29. The Company expects the program to reduce energy consumption by 19,070 MWh and provide incentives exceeding $14 million. Tr. at 35.29.

Additionally, within the prescriptive path of the Commercial and Industrial EnergyWise for Your Business program, DESC proposes to add a new suite of measures targeted to "agricultural customers such as dairy, poultry and swine farms by providing lighting, pumping, ventilation, irrigation and other energy efficiency measures specific to their business." Tr. at 35.27.

Furthermore, DESC proposes to add a Strategic Energy Management component to "provide energy management tools, coaching, and additional technical resources for commercial and industrial customers." Tr. at 35.27-35.28. The purpose of this component is to educate personnel managing energy resources for smaller industrial and commercial customers who often lack dedicated energy managers.

As mentioned, in addition to these new offerings, all of DESC's current energy efficiency programs will be expanded in the proposed suite of programs. First, the Neighborhood Energy Efficiency program ("NEEP") specifically targets low to moderate income communities, including mobile home customers, through well-publicized neighborhood sweeps providing direct install measures. Based on the program's success, DESC plans to expand participation in the program by approximately 45% over the next five years. Additional expansions include:

- For the Residential Heating & Cooling program, DESC proposes to expand the program to include incentives for the replacement of electric resistance heating with air source heat pumps and installation of heat pump water heaters. DESC also proposes to increase almost all of the rebates currently being offered.

- For the Residential Home Energy Check-Up program, DESC proposes to add low-flow showerheads to the Tier 1 measures that are incentivized at 100% of their cost. Additionally, DESC proposes a new set of Tier 2 measures that focus on the building envelope with incentives of up to 75% of the cost.

- For the Residential Home Energy Reports program, DESC proposes to convert the program from an opt-in program to an opt-out program that will initially target the top quartile of residential customers by consumption.

- For the Residential EnergyWise Savings Store (Online Store), DESC proposes to expand the products offered to include smart thermostats.

- For the Residential Appliance Recycling program, DESC intends to increase participation in the program through increased marketing.

- Last, for the Commercial Small Business Direct Install program, DESC proposes to expand participation in the program by approximately 75% in the next five years through targeted marketing efforts and by increasing the maximum incentive for equipment upgrades from 80% to 90%.

No programs are being eliminated. A complete discussion of all of the programs and their expansion and modification can be found in Hearing Exhibit 1.

Based upon the portfolio as a whole, Ms. Griffin testified that "DESC has determined that this proposal represents a balanced suite of DSM programs that are reasonably practicable for the Company to implement; are likely to be well received by customers; are technically and economically justified; and have a reasonable likelihood of providing significant net savings to customers and the system." Tr. at 35.31. Mr. Pickles also testified in support of the proposed suite of DSM programs:

> The programs represent a significant expansion of DESC's programs, even in the face of increasingly stringent federal codes and standards. The programs are all cost-effective, and as a whole, the portfolio is very cost-effective. Further, the programs are specifically targeted to the unique needs of the DESC service territory, which includes comparatively high concentrations of residential, low-income, hard-to-reach, and rural customers. The programs are based on strong program logic and are being implemented successfully by other utilities. Further, the costs and participation rates associated with the programs are reasonable in light of the scale of the programs and the nature of the DESC service territory.

Tr. at 51.15.

ORS agreed, "[t]he Company's modified and expanded portfolio is a reasonable mix of Programs designed to achieve benefits and energy savings to residential, commercial and industrial customers." Tr. at 196.5. No party opposed the proposed programs, the planned expansions, or the implementation plans for the new and modified programs.

### B. Joint Interveners' Proposals and Criticisms

While not challenging the programs themselves, the Joint Interveners challenged the overall scope of DESC's proposed suite of programs, arguing that not enough offerings were being made for low and moderate income customers, suggesting in general terms that certain programs, offerings or measures should be increased, and stating that higher saving goals should be established. Tr. at 150.4-150.5. The Joint Interveners did so principally through the testimony of their witness, Ms. Chant, who made a number of suggestions based on references to programs, measures and targets in other jurisdictions and historical data showing results which were achieved in other jurisdictions and at other stages of the development of DSM markets when dramatic efficiency improvements were easier and less costly to obtain. *Id.* Each of these criticisms and proposals are discussed below along with a suggestion made by ORS related to new avoided cost calculations.

1. *Proposed 1% Efficiency Savings Target*

The Joint Interveners argued that DESC "should be delivering savings levels over 1 percent," and that because it is not, the energy efficiency goals established "are not as aggressive as they can and should be." Tr. at 150.6. In its responsive testimony, DESC pointed out several flaws to the argument that a 1% target is appropriate, the principal of which involve the mismatching of data between periods and jurisdictions.

The Joint Interveners seek to justify adopting a 1% target going forward based on energy efficiency results they argue have been achieved by other utilities in the recent past. But the record clearly shows that in recent years energy efficiency market conditions have changed dramatically:

> Over the past ten years, federal and state efficiency standards and DESC's DSM programs have captured a great deal of the easily-achieved energy efficiency gains on our system. Under the mandates of the Energy Independence and Security Act of 2007, millions of incandescent light bulbs have been replaced by CFLs, and now LEDs. Federal mandates have greatly increased the efficiency of the heating and cooling units being installed on our system, including air conditioning units and heat pumps. Building codes, construction techniques and home building practices have resulted in increased home energy efficiency and better insulated houses. As a result, the target markets for DSM programs have shifted. Achieving

> additional savings has become more difficult and more expensive in light of past efficiency gains and current efficiency standards.

Tr. at 18.5-18.6. As a consequence, the reported efficiency gains on which the Joint Interveners rely were achieved under very different market conditions and in different service territories with different statutory and regulatory rules for DSM as well. For that reason, this historical data cannot establish that a suite of programs targeted to meet a 1% goal in DESC's service territory and under current DSM market conditions would be cost-effective as S.C. Code Ann. § 58-37-20 requires, or whether the resulting rate increases for customers would be acceptable.

Furthermore, the Joint Interveners based their proposed 1% goal in part on national statistics, but those statistics show that 74% of the jurisdictions reporting (37 of 50) have achieved savings of less than 1%. Tr. at 66.11-66.13. Mr. Pickles pointed out that the states that did achieve a 1% target included states with

(i) Very different retail rate levels than on DESC's system (including high cost states such as Hawaii, California, Massachusetts and Connecticut where rates make DSM savings easier to achieve);

(ii) Different weather patterns from South Carolina and therefore different weather-related energy usage patterns and different opportunities to achieve savings;

(iii) Different cost-effectiveness standards than those used in this jurisdiction;

(iv) Different penetration of natural gas as an alternative to electricity;

(v) Different approaches to computing net-to-gross ratio, which can inflate reported savings;

(vi) Different approaches to opt-out for commercial and industrial customers (DESC has a very flexible opt-out programs for industrial and commercial customers which limits the energy savings that can be achieved through its DSM programs); and

(vii) Different levels of rate impacts from DSM programs, which in some cases far exceed anything historically approved by this Commission.

Tr. at 66.12-66.13.

All of these factors make evaluating DESC's system based on these statistics potentially misleading. Specifically, compared to Duke Energy Carolinas ("DEC"), Mr. Pickles testified that DEC's "past savings are, in part, achieved with measures and programs that are no longer available or will not be cost-effective in 2024." Tr. at 66.22. Indeed, comparing DEC's current DSM portfolio as set forth in its tariffs with that proposed by DESC in this proceeding shows that a number of measures offered by DEC and contributing to their savings levels in past periods were evaluated in the Potential Study and found not to be cost-effective if offered in DESC's service territory at this time. Comparing the number of programs between DESC and Duke Energy Progress ("DEP") and DEC is also not meaningful because DESC bundles its programs differently. Many of the same measures are provided, but for marketing purposes, are bundled into a smaller number of broader and more comprehensive programs by DESC. Tr. at 66.7-66.8. It is also the case that DEP and DEC report their DSM results for their combined South and North Carolina service territories, further complicating any comparison with DESC.

The Joint Interveners proposed no specific plan or suite of programs for achieving the proposed 1% goal for energy efficiency savings. Apart from comparisons to reported statistics in other jurisdictions, they offered no evidence to show that this target could be met consistent with the demographics and technology base of DESC's system, the current state of the energy efficiency market, and the statutory requirement that DSM programs be "cost-effective." S.C. Code Ann. § § 58-37-20. On the other hand, the Potential Study determined that in current energy efficiency market conditions, an incremental annual savings of 0.7% could be achieved in Program Year 5 under the expanded program scenario on a cost-effective basis considering current market conditions and DESC's service territory. Hearing Ex. 1 at 25. Based upon the lack of evidence supporting implementation of a 1% savings as practical for implementation on DESC's system, cost-effective, or resulting in acceptable rate impacts, the Commission declines to adopt the 1% target as the Joint Interveners request.

2. *Expanding the Size of the NEEP Program for Low and Moderate Income Customers*

The Joint Interveners also argued that because DESC's flagship program for low and moderate income customers, NEEP, is so cost-effective (TRC score of 5.9), it should be expanded. Tr. at 150.20-150.22. DESC's proposal, however, already expands NEEP dramatically as part of the new portfolio. The Joint Interveners acknowledge this and propose that the Commission should order a yet-larger expansion.

As Mr. Raftery explained, under the new suite of programs, NEEP "will be prioritized with significantly increased funding and resources so that more low-income communities can benefit." Tr. at 18.6. NEEP consists of neighborhood sweeps that kickoff at a local church, school, or public facility, with local community leaders endorsing the program and helping overcome local concerns or reluctance to participate. The sweep then progresses over months going door to door in the form of in-home visits with customers. Tr. at 35.16-35.17. During the door to door visits, direct install measured are provided, including weatherization measures for targeted mobile home customers. Tr. at 35.16. Under the revisions to the program, the Company aims to increase the annual number of neighborhood sweeps with the goal of expanding participation in the program by approximately 45% over the next five years. Tr. at 35.16. Funding will increase by approximately 50%. Hearing Exhibit 1 at 33.

The Commission finds that the expansion of NEEP proposed here is reasonable. The Joint Interveners have made no showing that a further expansion of NEEP at this time is practical. The Commission would encourage the Company use the Advisory Group and the consultative process it represents to explore any changes to NEEP that may be warranted during the five-year program life and to report those changes to the Commission in its annual filings. If further expansion is shown to be warranted based on the success of the current expansion plan, such expansion may be considered when results of the current expansion plan are known.

3. *Relaxing the Income Standards for Neighborhoods Qualifying for NEEP*

The Joint Interveners suggested that NEEP could be expanded by relaxing the income requirements for neighborhoods to be included in the program. Currently, the Company identifies neighborhoods where at least 50% of the residents have incomes at or below 150% of the Federal poverty guidelines. Ms. Chant suggested raising the limit to 200% of the Federal poverty guidelines.

The Commission does not see the need to mandate a relaxation of this standard at this time. There is no evidence in the record that the current income standards constrain the effectiveness of the program or impose practical limitations on the delivery of program benefits. All other things being equal, there are advantages of targeting the neighborhoods that meet the current income standard first before moving on to those neighborhoods that would only qualify under a more relaxed standard. Under the provisions of Order Nos. 2010-472 and 2013-826, it is within the Company's discretion to relax the income qualification standards at any time if it determines that doing so would support the on-going efficiency or effectiveness of the program. The Commission encourages the Company to monitor this question and to take action if the current income standards become a practical constraint on the delivery of NEEP. Any such action should be undertaken after consultation with the Advisory Group and with notification being provided to the Commission as required by Order Nos. 2010-472 and 2013-826.

4. *Adding Additional Measures to the NEEP Program for Low and Moderate Income Customers*

The Joint Interveners suggested that the NEEP program should be expanded to include additional measures related to such things as building envelope efficiency measures, replacement of resistance heating, and wi-fi thermostats. In his rebuttal testimony, Mr. Pickles shows that the majority of the proposed measures that the Joint Interveners propose for low-income customers are already included in DESC's proposed suite of programs and are available to low-income customers through the Residential Heating & Cooling and Water Heating program, the EnergyWise (Online) Savings Store and the Home Energy Check-Up program (Tier II). Tr. at 66.25-66.26. One suggested program, refrigerator replacement, was evaluated in the Potential Study and was found not to be cost effective by a substantial margin (a TRC score of only 0.59). The evidence of record does not support the Joint Interveners' proposal that the Commission should order further expansion of the programs available to low-income and moderate income customers at this time.

5. *Additional Programs for Moderate Income Customers*

The Joint Interveners suggested that DESC's portfolio should include additional programs for moderate income customers, as distinct from low income customers. Tr. at 150.22-150.23. However, the record shows that there are multiple energy savings opportunities for moderate income customers:

(i) Moderate income customers qualify for all of DESC's residential DSM programs. DESC does not income-test participants its programs.

(ii) The NEEP program targets neighborhoods where at least 50% of the residents have incomes at or below 150% of Federal poverty guidelines. However, within those neighborhoods, DESC does not require income verification on a customer by customer basis and does not exclude residents of these neighborhoods from participation in these programs based on income. In fact, a substantial portion of the customers who receive benefits under NEEP are moderate income customers.

(iii) DESC program for distributing high efficiency lightbulbs to walk-in customers at its business offices was specifically instituted to benefit the moderate income customers and seniors who, along with low income customers, are primary patrons of its business offices.

(iv) DESC is adding important new multifamily housing programs to its portfolio of DSM programs which will benefit moderate income customers.

Tr. at 41.2-41.4. It is not clear from the record in this proceeding how programs specifically targeted for moderate income customers would function absent a process for income testing of program eligibility (which DESC and this Commission has historically not embraced) or that such programs, if adopted, would be cost effective or practical to implement. Therefore, the record in this proceeding does not demonstrate a need for the Commission to order the creation of programs specifically targeting moderate-income customers.

6. *Upstream Programs*

Upstream programs are programs that provide incentives to equipment manufacturers and wholesalers to lower the cost of high efficiency equipment and appliances. DESC has not included upstream programs in its proposed portfolio, focusing instead on incentives paid directly to customers while relying on trade allies to assist in promoting the programs to customers. The Joint Interveners testified that it was improper for DESC not to include upstream programs in its DSM portfolio. Tr. at 150.11-150.13.

In response, DESC presented testimony that it had considered including upstream programs to its suite of programs but determined not to do so. Specifically, "as part of the extensive local market research done during the potential study, DESC hosted focus group meetings with distributors and contractors in order to explore the concept of upstream programs. The feedback from distributors and contractors was decisively against the idea of an upstream program." Tr. at

66.19. In addition, DESC was concerned that upstream programs have a number of negative features. Specifically, they distance customers from the utility's DSM program and its trained trade allies, reduce customer engagement with DSM programs generally, limits the customer choice when deciding on a contractor, require intrusive qualification and tracking mechanisms to ensure that incentives paid to manufacturers and distributors stay within the utility's service territory and make it difficult to ensure that the incentives are in fact driving customers' choices of high efficiency products. Tr. at 66.19.

In its testimony, the Company's witness testified that "DESC will continue to consider upstream programs for future filings, but does not believe that they are appropriate for DESC, its trade allies, and its customers at this time." Tr. at 66.20. In light of the foregoing, the Commission finds that the record in this proceeding does not justify an order requiring the Company to institute upstream incentive programs at this time.

7. *Residential New Construction*

The Joint Interveners suggested that DESC's portfolio should include a residential new construction program. Tr. at 150.13. In response, DESC's witnesses testified that it offered a Residential New Construction Program in Program Years 1-4 (roughly 2010-2014) but with limited success. The lack of success was due to factors including:

(i) Naturally occurring high-efficiency standards that already apply in new home construction;

(ii) A low net-to-gross ratio (meaning that a significant amount of incentives were being paid to builders who would have met the higher efficiency standards without incentives being paid to them);

(iii) The fragmented nature of the new home builder market in the service territory (which results in increased program costs and lower effectiveness);

(iv) The low number of new home starts each year in DESC's service territory (which is largely concentrated in cities, towns and other developed areas); and

(v) The fact that such program can reach only a relatively few customers (those building or buying new homes) compared to programs that can allow a much broader group of customers to participate and benefit.

Tr. at 66.21. The Commission finds that the reasons given justify DESC's decision not to pursue new home construction programs at this time.

8. *Municipal LED Lighting*

DESC's portfolio of programs includes a new program to encourage municipal customers to switch to high efficiency LED lighting. LED lighting is more energy efficient, provides better quality of light, has a longer service life with less maintenance, and can be monitored and controlled remotely. However, the cost of replacing fixtures has been a barrier to municipalities making the transition. In response, DESC is proposing a program to buy down the cost of the LED lighting during the transition to make it revenue neutral to the participating municipalities for five years. The program initially targets replacement of 50% of the existing stock of municipal lighting in three to five years. Tr. at 35.28-35.29.

The Joint Interveners propose that the program should target replacing 100% of municipal lighting in DESC's service territory over five years. In response, DESC's witnesses testified that DESC was "hesitant to take credit for full implementation of more than 50% of municipal LED installation since it is quite possible that, over time, this market may move to adopt LEDs on its own as pricing becomes more competitive. If LED prices were to drop significantly, this would eliminate the need for DESC incentives to encourage the installation of high efficiency fixtures." Tr. at 66.18. Furthermore, DESC "currently anticipates that it will continue to offer incentives as long as doing so is needed to influence the decision-making process." Tr. at 66.18-66.19. However, it would not be logical to pay incentives if not needed to encourage the transition going forward.

The Commission finds that the record establishes that the scope of DESC's program to encourage the implementation of municipal LED lighting is reasonable as proposed. Mandating an expansion of it is not warranted at this time, but the Company is directed to continue to update the Advisory Group on the progress of this program and may modify its plans and expand or extend the program if future circumstances warrant.

9. *Shortcomings of the Potential Study*

The Joint Interveners criticize the Potential Study for not "defining the full maximum achievable potential of energy efficiency in [DESC's] territory" and using that as the starting point for developing programs. Tr. at 150.8; Tr. 152.5-152.6. Instead, DESC's testimony shows that the Potential Study defines a path by which DESC can boost energy savings by 160% over five years, dramatically expand both its low and moderate income and small business offerings, and expand its DSM spending by approximately double while keeping the DSM programs strongly cost effective. The fact that the Potential Study did not identify the maximum achievable potential for DSM at this time in no way undercuts its validity as a roadmap for strengthening its DSM offerings as DESC proposes. Nor do the Joint Interveners point to any statutory, regulatory or other requirement (under S.C. Code Ann. § 58-37-20 or elsewhere) requiring that the Potential Study seek to identify maximum achievable DSM potential as its goal. The Commission finds the Potential Study to be a valid basis on which to consider the expansion of DSM programs proposed by DESC in this proceeding and accepts it as such.

10. *Avoided Cost Recalculation*

In its testimony, ORS raised the question of how the Company's DSM programs and evaluations would be revised to reflect the updated avoided cost calculations or methodologies that were litigated and will shortly be approved in Docket No. 2019-184-E. Tr. at 196.10. In response, DESC, through the rebuttal testimony of Mr. Raftery, agreed that such an updating would be appropriate.

> Once the avoided cost methodology is approved, the resulting avoided costs would be used to update any energy and demand savings for the portfolio as well as to compute the shared savings incentive. Further, once the new methodology is approved, DESC will use the resulting avoided costs to re-evaluate the cost effectiveness of the full range of measures under each of the proposed programs. This, along with input from its Energy Efficiency Advisory Group, will determine if any new measures are appropriate to implement or if any existing measures should be removed.

Tr. at 23.2. Furthermore, once established, "the updated avoided cost values should not be modified until the five (5)-year program period has expired." Tr. at 23.2. ORS has not objected to this approach. The Commission finds it to be reasonable and directs the Company to proceed as indicated in Mr. Raftery's rebuttal testimony.

11. *Conclusion as to DESC Proposed Suite of Programs and the Potential Study on Which They Are Based*

The Joint Interveners' critique of DESC's suite of programs and the Potential Study on which they are based is not backed by any quantitative analysis showing that any specific new measures or programs or expansions of measures or programs would be cost effective on DESC's system or would pass the TRC test. The Joint Interveners did not provide any data or analysis quantifying the costs of expanding the programs as they have suggested, the receptivity or likely participation levels of DESC's customers if such an expansion were implemented, the efficiency results that could be achieved, or the market barriers and resource constraints that would have to be overcome for such an expansion to be effective. Many of the suggestions the Joint Interveners make are in the nature of broad brush proposals for expansion of the existing suite of programs and due to their open-endedness are not subject to quantification.

The Commission operates under a clear statutory mandate: The Commission may approve DSM programs which are "cost effective." S.C. Code Ann. § 58-37-20. The Joint Interveners have not provided a record on which the cost effectiveness of their proposals and criticisms can be assessed. Accordingly, they cannot be adopted.

Furthermore, adopting any such proposals would be unwarranted particularly in light of the fact that DESC is already proposing a doubling of its investment in DSM programs with all the challenges that an expansion of investment and activity of this magnitude represents. It is quite appropriate for all interested parties to monitor the success of a proposed expansion of this magnitude—which is expected to increase energy efficiency gains by 160% over the current portfolio—and to evaluate further expansions when the results achieved by this expansion are known. The Commission encourages the Joint Interveners to continue to participate in the Advisory Group process and to work collaboratively with DESC to expand programs where doing so is warranted.

The Commission finds that the record in this proceeding does not support an order requiring the Company to further expand or modify its proposed DSM options at this time. After consideration of all of the evidence presented, the Commission finds that DESC's proposed suite of DSM programs represents an appropriate and reasonable approach for implementing DSM measures that are in the public interest and are consistent with S.C. Code Ann. § 58-37-20. The Commission therefore finds that the proposed suite of DSM programs should be and is approved.

## VI. PROGRAM FLEXIBILITY

DESC has requested the authority to continue to be able to modify, amend, terminate and/or add any measure or program to its suite of programs without the requirement of seeking prior Commission approval to do so. The Commission previously found that "flexibility in modifying this suite of programs requested by [DESC] will aid the Company in implementing its DSM programs in an efficient manner and will provide it with the ability to adjust these programs based on evolving market conditions and information." Order No. 2010-472, p. 9. In support of the request to continue this flexibility, Witness Griffin provided examples of its beneficial use in the past as market conditions and evaluation results have required programs and measures to be changed. Specifically, this flexibility has been used to increase rebate amounts under the Heating and Cooling program, add the mobile home weatherization component to NEEP, move qualifying measures from CFL to LED bulb installation across all residential programs as markets shifted, and add water conservation measures to the Home Energy Check-up program, NEEP, and the EnergyWise Savings Store. Tr. at 35.6. Per Ms. Griffin, such flexibility in modifying its programs allows the Company the ability "to address changes in appliance standards and market conditions and/or to implement EM&V or ORS recommendations." Tr. at 35.6.

The Joint Interveners seek to limit this flexibility, proposing that the Commission adopt Program Flexibility Guidelines taken from orders of the North Carolina Utilities Commission. Tr. at 150.25-250.27. The proposed guidelines contain multiple trigger points where program modifications require differing levels of stakeholder consultation and agreement, and commission approval. In North Carolina, the guidelines have engendered disputes and disagreements, resulting in the filing of Flexibility Guidelines Reference Documentation consisting of 13 pages of matrices, reporting templates and interpretive material intended to address implementation conflicts. *See* Hearing Ex. 4. However, even this reference documentation cannot be directly applied in South Carolina. As Ms. Griffin testified, North Carolina's DSM programs "are embodied in Commission-approved tariffs [that] must be formally amended before substantive changes are made to the programs." This represents an "entirely different approach to DSM program administration" than South Carolina uses. Tr. at 41.4-41.5.

Based on the record in this proceeding, the Commission finds that continuing to allow DESC flexibility in modifying this suite of programs will aid the Company in implementing its DSM programs in an efficient manner and will provide it with the ability to adjust these programs based on evolving market conditions and information to better serve its customers. The Joint Interveners point to no specific problem with the current structure of regulatory oversight that would warrant a change to the current structure. The Commission affirms the program flexibility previously adopted in Order Nos. 2010-472 and 2013-826 and directs DESC to continue to include information regarding any and all such modifications as required in those orders.

## VII. REVIEW PERIOD AND PROCESS

In its Application, DESC proposes to be allowed a period of five years to implement the proposed suite of DSM programs without changes caused by fluctuations in avoided costs or changes mandated by other parties. This five-year period of program stability is generally consistent with Order No. 2013-826, which permitted a six-year period of program stability. Witness Griffin explained that a five-year period is consistent with the "planning horizon under which the programs have been formulated and their ability to provide benefits to customers has been measured." Tr. at 35.30.

DESC does not propose any change to the annual review process or timetable for the annual review of DSM programs and adjustment to the rate rider as established by Order No. 2012-472 and amended by Order No. 2013-826.

The Commission finds it reasonable, in the public interest, and in accordance with law and regulatory policy to allow the requested five years of program stability after the date of this Order and that, after the five-year time period has elapsed, any party may request a review of the suite of programs. During the interim, the Company will continue its regular consultation with the Advisory Group and other stakeholders, will discuss with them the results of annual EM&V reviews, and will present updates to programs and other information to the Commission as part of the annual oversight process. The necessity for imposing any additional procedural requirements has not been demonstrated on this record.

The Joint Interveners also propose that the Commission order the Company to come before it for a mid-period review of the DSM programs in addition to the updates provided with each annual review. Such a proposal is inconsistent with the five-year period of program stability referenced above and is inconsistent with the terms of Order Nos. 2010-472 and 2013-826. For those reasons, the request is denied.

## VIII. INVESTIGATION AND IMPLEMENTATION OF PROGRAMS TO REDUCE WINTER PEAK

In Order No. 2018-322(A), the Commission required DESC to "investigate and implement economic demand side management and energy efficiency programs with an emphasis on decreasing the newly developed winter peak." Order No. 2018-322(A), p. 46. There are two parts to this directive. Demand side management (also called demand reduction or DR programs) reduce peaks by changing customer usage patterns to shift demand to off-peak periods. Energy efficiency programs reduce peaks by reducing the amount of electricity consumed to achieve a particular end result.

As witnesses for both DESC and the Joint Interveners testified, almost all energy efficiency programs, with the exception of air conditioning programs, reduce winter peak. Tr. at 23.3. The Potential Study "assessed and adopted a number of broad-based DSM programs that reduce winter peak." Tr. at 23.2-23.3. While nearly all energy efficiency programs have an effect on winter peak, measures to replace electric resistance water heaters with heat pump water heaters and measures to replace electric strip heating with energy efficient heat pumps are examples of specific programs with the potential to have a high impact on winter peak. These measures are included in the proposed plan. Tr. at 23.3. In total, DESC has presented a suite of programs that is forecasted to reduce winter peaks by 111 MW over five years and 237 MW over ten years. *See* Late Filed Hearing Ex. 7, DESC Response to Late Filed Hearing Ex. 5. This represents a meaningful reduction in the growth of winter peak and is fully responsive to the directive in Order No. 2018-322(A) concerning DSM programs to reduce winter peak.

As to DR programs, DESC has historically offered them in the form of standby generation programs, interruptible rate rider programs and time of use and real time pricing rates. *See* Hearing Ex. 2, Rider to Retail Rates. Each such program incentivizes or compensates customers for moving demands outside of peak period by curtailing operations when requested by the Company (Interruptible Rate Rider), self-supplying generation to meet demands during peak periods (Standby Generator Program) or sending price signals that incentivize load shifting (time of use and real time pricing rates). These programs historically have not been considered a part of DSM program offerings. The rate credits and incentive levels they reflect are set as part of the general retail electric rate making and are reviewed and adjusted based on cost of service studies in each rate proceeding.

As the record in this proceeding indicates, DESC intends to continue the DR programs already in place. Tr. at 18.10. As Mr. Raftery testified, there are environmental and operational barriers to expanding programs like the Interruptible Rate Rider and Standby Generation Program and the current rate and rate credit levels for the DR tariffs and riders appear to be appropriate. Tr. at 18.11-18.12.

The Potential Study reviewed other measures for expanding DR programs on DESC's system, including direct load reduction programs such as water heater controls and thermostat setbacks. *See* Tr.at 18.11; Hearing Ex. 1, Potential Study, at Section 11.6, Section 11.8. The Potential Study concluded that expanding direct load control programs on DESC's system would not be a cost-effective means to decrease winter peak over the five-year planning timeframe that would apply to such programs. Tr. at 18.11. As a result, no expansion of direct load control programs is being proposed at this time.

The Potential Study also evaluated rate-based demand response programs such as residential and commercial time of use ("TOU") rates and Critical Peak Pricing ("CPP") rates. The study determined that these programs would become cost effective when Advanced Metering Infrastructure ("AMI") is installed on DESC's system to support them. DESC is in the process of rolling out AMI to 760,000 customers across its service territory at a cost of $98 million. This process will take approximately three years. See Docket No. 2019-241-EG. Because AMI technology works through a networked communication among AMI meters in a given location, AMI cannot be rolled out piecemeal, and sufficient saturation will be required before marketing new DR programs becomes feasible. Tr. at 23.7.

DESC agreed with the recommendation from ORS that DESC should reevaluate its DR programs once AMI becomes available on its system, and the Company has committed to keep the Advisory Group apprised of its progress and to propose specific program plans for residential and commercial rate-related DR once it is practical to do so. Tr. at 23.6. Until that time, "[n]one of the demand response programs modeled were cost-effective over the upcoming 5-year program cycle, in part due to their limited impact on DESC's winter peak. Therefore, none are proposed for implementation at this time." Tr. at 51.14.

The Commission concludes that the Company adequately investigated economic demand side management and energy efficiency programs with an emphasis on decreasing the newly developed winter peak. As Witness Raftery explained, programs and measures will be implemented through the proposed suite of programs that will substantially reduce the winter peak. Further, DESC explained that once AMI is installed on its system, DESC will prepare program plans to implement cost effective DR programs for residential and commercial customers and modify its suite of DSM programs to include them. Tr. at 18.11. Based on these facts and commitments, the Commission finds that DESC has fully complied with the directives related to investigating and implementing winter peak reduction programs contained in Order No. 2018-322(A).

## IX. <u>COST RECOVERY MECHANISM</u>

DESC asks Commission approval to continue the cost recovery mechanism currently in effect as approved in Order Nos. 2010-472 and 2013-826 with four modifications: (1) shortening the amortization period for recovery of DSM balances to three years; (2) changing the carrying cost applied to unrecovered DSM balances to the Company's weighted average cost of debt; (3) increasing the shared savings incentive to 11.5%; and (4) shortening the period during which customers are prevented from opting out of DSM programs after receiving DSM benefits from five years to three years.

### A. Amortization Period

In Order No. 2013-826, the Commission approved a five-year amortization period for recovering DSM program costs. Order No. 2013-826, pp. 13-14. In its Application, DESC seeks to shorten this period to three years. In support of this request, DESC Witness Rooks testified, "[w]ith a shorter amortization period, recovery of program expenses is more timely. Rates more closely track program expenses year to year. Price signals to customers and stakeholders are clearer." Tr. at 133.4-133.5. Mr. Rooks further explained that a shorter amortization period helps reduce the inherent lag in rate recovery of program costs under the rate rider and helps reduce the amount of DSM costs that are accumulated as a regulatory asset and carried on DESC's books. Tr. at 133.5-133.6. Mr. Rooks explained that shortening the amortization period does not reduce the amount of underlying program costs to be recovered, but it does reduce the carrying costs over time because unrecovered balances will be lower. Tr. at 133.6.

No other party objected to reducing the amortization period from five years to three years. ORS agreed that "[t]he reduced amortization period will provide a more accurate cost signal to customers while also reducing carrying costs." Tr. at 196.16. However, ORS did recommend that the amortization period should be applied to programs individually "to better align the amortization period with the Program life." Tr. at 196.18. Witness Rooks replied that doing so would create a "vintaging scenario" for each program that would be in conflict with DESC's current amortization practice for DSM costs. Thus, Mr. Rooks proposed technical changes to the administration of the rate rider, with which ORS agreed. Tr. at 137.2-137.3; 198.8.

Based upon the evidence presented, the Commission finds that it is reasonable, in the public interest, and in accordance with S.C. Code Ann. § 58-37-20 that DESC be allowed to recover its reasonable and prudent costs incurred in implementing, operating and administering the approved DSM programs using a three-year amortization period for those costs. The Commission accepts the proposal and directs DESC to administer the rider in accordance with Mr. Rooks' rebuttal testimony, as agreed to by ORS.

### B. Carrying Costs

In Order No. 2010-472 and Order No. 2013-826, the Commission approved accrual of carrying costs at the Company's weighted average cost of capital. Order No. 2013-826, pp. 13-14. Thereafter, the Company agreed to a carrying cost equal to the ten-year U.S. Government Treasury Note rate plus 65 basis points. Order No. 2015-307, p. 3. As of July 31, 2019, that rate was 2.665%. Rooks Direct 7:9. In its Application, DESC requests to change the carrying costs going forward to its weighted cost of debt. As of June 30, 2019, the Company's weighted average cost of debt was 5.95%. Tr. at 133.7. As Witness Rooks testified, "[w]hile this is an increase in return, the request is conservative in the sense that, all other things being equal, the cost of capital that would apply to comparable investments in generating assets would be the higher weighted average cost of capital, which per the last Commission rate order is 8.20%." Tr. at 133.7. Comparatively, the weighted average cost of debt is 27% lower. Tr. at 133.7.

No other party objected to changing the carrying costs to DESC's weighted average cost of debt. ORS agreed that using the weighted average cost of debt "is consistent with the 'make whole' principle which allows the Company to 'recover costs and obtain a reasonable rate of return' on investments in DSM. . . Programs." Evans Direct Tr. at 196.15-196.16; Tr. at 198.7.

Based on the record in this proceeding, the Commission finds that calculating carrying costs under the DSM rate rider at DESC's weighted average cost of debt, beginning December 1, 2019, is consistent with the statutory mandate that investment in DSM programs should be at least as financially attractive as investments in generating assets in accordance with S.C. Code Ann. § 58-37-20 and is just and reasonable.

### C. Shared Savings Incentive

S.C. Code Ann. § 58-37-20 requires rates established by the Commission under its provisions to be sufficient to make the utility's DSM programs at least as financially attractive as construction of new generation facilities. To accomplish this mandate, DESC requests that the rate rider include a shared savings incentive equal to 11.5% multiplied by the estimated net benefits of each energy efficiency program calculated using the TRC Test. Per Witness Pickles, an incentive of this type is "consistent with industry norms and provides a reasonable balancing and alignment of customer and shareholder interests." Tr. at 51.14. Mr. Rooks testified that increasing the shared savings incentive to 11.5% would increase the typical residential customer bill by $0.01 per month (after the shared savings incentive is amortized into the rate calculation over a five-year period). Tr. at 133.9. Comparatively, residential customers will receive benefits with a net present value of $10,310,250, or approximately $0.26 per month (after a five-year amortization) due to the DSM investment made in Program Year 10.[2] Tr. at 133.9.

ORS opposed the increase, stating, "[t]he Company has provided no basis or justification for the need to increase the shared savings incentive beyond the fact that it is consistent with the level of incentive provided to other utilities, is an important increment to earnings, and would somehow compensate the Company for increasing the energy savings through the proposed expansion of the Programs." Tr. at 196.16. ORS further argued that because the Company's proposed suite of programs would not offer the same levels of annual energy savings as other utilities are currently achieving, it should not receive a comparable shared savings incentive. Tr. at 196.16-196.17. ORS recommended setting the shared savings incentive at 9.9% of program savings. Tr. at 196.17. ORS also argues that NEEP should be excluded from the shared savings

[2] Estimated bill impacts are for illustrative purposes and have not been adjusted for the Tax Rider.

incentive, as it is a low-income program, and low-income programs are not generally cost effective. Tr. at 196.19. However, the evidence of record indicates that NEEP is highly cost effective. The Commission finds no reason why it should fail to incentivize DESC's investment of time and resources into this program.

The Joint Interveners opposed the increase and instead proposed to modify the shared savings incentive to include a sliding scale approach with DESC receiving an 11.5% incentive only if it receives annual incremental savings of 1.15% or higher, a rate much higher than the Potential Study indicates can be obtained under the proposed programs. Tr. at 150.27-150.30. Ms. Chant testified that a sliding scale concept "is a useful one in performance incentives because it provides motivation for the program administrator to continue to push its performance to higher and higher levels, rather than just meeting a minimum threshold and stopping its effort for improvement of results." Tr. at 150.29.

Mr. Pickles testified that "the net income that DESC would otherwise earn on the 115.5 MW of capacity saved by the proposed portfolio is $5,597,280. This amount is equivalent to a shared savings percent of 11.4%. . . ." Tr. at 66.7. Therefore, Mr. Pickles testified, 11.5% is justified because that is the percentage that "ensure[s] that the net income of an electrical or gas utility regulated by the commission after implementation of specific cost-effective energy conservation measures is at least as high as the net income would have been if the energy conservation measures had not been implemented." Tr. at 66.7 (quoting S.C. Code Ann. § 58-37-20). Additionally, Mr. Pickles testified, as discussed above, that program performance between DESC and other utilities cannot be compared for purposes of setting the incentive as the Joint Interveners have proposed because the programs are structured differently and because comparison of past performance of other utilities cannot be used as a benchmark for future performance given the rapidly changing market. Tr. at 66.7-66.9. Regarding a sliding scale, Mr. Pickles testified that under Joint Interveners' scale, it is possible that the Company could receive nothing. Tr. at 66.28-66.29.

Based upon the evidence presented, the Commission finds that it is just and reasonable and fully consistent with S.C. Code Ann. § 58-37-20 that DESC be allowed to recover an incentive equal to 11.5% of savings without implementation of a scaled system. From a rate impact standpoint, the difference between a 6% shared savings incentive and one of 11.5% is relatively small, and customers retain the lion's share of the savings under either. Shared savings at the 11.5% rate is in no sense unreasonable or outside of the range generally supported in the industry. While there were factual disputes as to the proper standard for valuing the investment in generation capacity foregone as a result of successful DSM programs, there can be no doubt that such capacity will be reduced and that reduction will have a negative impact on earnings. The Commission does not find credible the assertion that the value in question is zero, and the most credible evidence on the record is Mr. Pickles' valuation based on embedded generation cost, which supports at least an 11.4% shared savings rate. As Mr. Raftery testified, "DESC is essentially doubling spending and energy savings from its DSM programs for its customers." Tr. at 18.14. A shared savings incentive of 11.5% reflects this heightened level of programming and investment in DSM programs.

Further, there are sound regulatory reasons why the Commission disfavors a sliding scale for shared savings as suggested by the Joint Interveners. By its nature, the incentive received under a fixed percentage formula increases where programs are successful and declines where they are not. Adding a sliding scale creates a double penalty for underperformance and a double bonus for over-performance. It also injects artificially set target levels into the incentive calculation, which can distort decision-making in an attempt to meet key thresholds. In all cases, a utility must balance its interests in incentives with the interest of its ratepayers in ensuring that DSM spending is as cost-effective as possible and overall rate impacts on customers are reasonable. Supercharging the incentive calculation by use of sliding scale percentages can have unintended negative consequences.

Based the record in this proceeding, the Commission approves the Company's request for a shared savings percentage of 11.5% based on the TRC test savings. The calculation of the incentive will not otherwise change from the procedure described in Order No. 2010-472, as amended by Order No. 2013-826.

### D. Opt-Out Provision

Under Order Nos. 2010-472 and 2013-826, certain large non-residential customers may opt out of DESC's DSM programs and not pay the charges collected under the DSM rate rider by certifying that they intend to implement their own energy efficiency measures. Order No. 2010-472, p. 18; Order No. 2013-826, pp. 22-24. A large percentage of DESC's large general service industrial customer base has opted out of the DSM programs, which limits the energy efficiency savings that can be achieved with this customer group. This was cited as a matter of concern for the Joint Interveners.

In its application and testimony, DESC does not seek to modify the current opt-out provisions, but it does seek to modify the period during which a customer must remain in the program after accepting DSM benefits. DESC seeks to reduce the no opt-out period from five years to three years. DESC Witness Rooks stated, "[t]he purpose of the 'no opt-out' period is to require customers who accept DSM benefits to remain subject to the rate rider during the time that costs associated with those benefits are being collected. If the amortization period of DSM costs is reduced from five to three years, the 'no opt-out' period should also be reduced to three years."

Tr. at 133.10. The Company will not require existing opt-out customers to renew their opt-out notification.

No party opposed DESC's request to amend the opt-out provision. *See* Tr. at 186.7. The Joint Interveners, however, request that the opt-out program be restructured so that it is easier for non-residential customers who have opted out to opt back into the energy efficiency programs. Tr. at 150.30-150.32. The precise way that the program would be restructured was not specified, although the suggestion was made for having a week every year when customers could opt back in to the program without being back-billed. Tr. at 150.31-150.32.

In response, Ms. Griffin testified that "customers who have opted out of our DSM programs have made an informed business decision that they can efficiently and effectively implement energy savings measures on their own." Tr. at 41.8. This is entirely consistent with Walmart's testimony in this matter. Tr. at 186.7. Furthermore, allowing customers to opt out of paying DSM charges after receiving DSM benefits would be unfair to other customers. Tr. at 41.8. Finally, Ms. Griffin testified that an amnesty period would be inconsequential because DESC does not back bill customers opting back into the system. 41.9-41.10.

The record in this proceeding provides no basis to conclude that there is a practical reason to change the current no-opt out rules or that doing so would result in more customers returning to the DSM program. The record supports continuing DESC's opt-out provisions as currently in effect, with the modification of reducing the period of time during which a customer must remain in the program after accepting benefits from five years to three years.

### E. Rate Rider Corrections

DESC has also requested that the text of the DSM Rate Rider be amended to correct two typographical errors in the current version. The changes are explained in the testimony of Mr.

Rooks. Tr. at 133.11-133.12. No party objected to correcting these errors, and the Commission grants this request. The Commission further finds that, except as set forth above, all other aspects of the rate recovery mechanism previously approved in Order No. 2013-826 will continue.

**F. Found Revenues**

ORS proposed that DESC's lost revenue be reduced by "found revenues" for purposes of calculating the rate rider. Per ORS, found revenues are "any increases in revenues resulting from any new activity by the Company that causes a net increase in any customer's demand or energy consumption." Tr. at 196.18. ORS supports their request on the basis that DEP and DEC currently include this adjustment in their rate rider, and the Commission approved doing so. Tr. at 196.19; Tr. at 198.2. Hearing Exhibit __ (GWE-1) provides a "decision tree" that Mr. Evans proposes as a guide for evaluating found revenues. In summary, practically all utility activities that result in the creation of new revenues create found revenues that would be deducted from DSM lost revenue recovery unless a) the activity was undertaken at the specific request of a governmental entity, or b) the Commission were to specifically exempt the revenue source from being considered found revenue.

In response, Witness Pickles testified that "absent implementation of energy conservation measures, all 'Found Revenues' would be available to the Company to offset costs and thereby contribute to net income." For that reason, reducing lost revenue by found revenues necessarily results in a utility recovering less than its net income absent its investment in DSM. Tr. at 66.3-66.4. This result would be inconsistent with the plain language of S.C. Code Ann. § 58-37-20. Additionally, there are costs associated with the programs and energy services that generate found revenue. ORS's proposal provides no opportunity for a utility to recover those costs, which is neither just nor reasonable. Tr. at 66.4. Finally, Mr. Pickles explained that there are many contexts in which important public policies involve the promotion of electric sales, as in the investment in electric vehicle infrastructure, the switching of industrial processes to electricity as a lower emissions energy source, or promotion of economic development generally. The found revenue concept could penalize the utility for investment in such efforts, which could be in conflict with those public policy goals. Tr. at 66.5-66.6. Similarly, the found revenue approach could penalize programs to increase off-peak sales to more efficiently utilize electric system capacity or absorb high levels of solar generation, which benefit customers by lowering rates. In short, the found revenue proposal could penalize economic development and marketing activities. Tr. at 66.5-66.6.

Regarding DEC's and DEP's adjustment for found revenues in their rate rider, the ORS conceded that no hearing was held in that matter, no issues were contested, and, therefore, the Commission was never asked to make a specific, contested determination that reducing lost revenues by found revenues would be lawful within the confines of S.C. Code Ann. § 58-37-20. Tr. at 210-211. Further, Witness Evans conceded that the statute, not a previous settlement agreement with a third party, controls this Commission's actions. Tr. at 211. The Commission agrees that the agreement by DEC and DEP to reduce their lost revenues by found revenues is of no consequence in this proceeding. Parties are free to agree to more restrictive measures than the law requires, but S.C. Code Ann. § 58-37-20 governs the Commission's rulings in this matter.

The Commission finds that S.C. Code Ann. § 58-37-20 mandates full recovery of lost revenues, without any reduction for found revenues. Should DESC's lost revenues be reduced by found revenues, the Company would not, as the statute requires, earn net income after implementation of specific cost-effective energy conservation measures that is at least as high as the net income would have been if the energy conservation measures had not been implemented. Moreover, the Commission finds Mr. Pickles' analysis of the financial unfairness and potential negative public policy consequences of a found revenues approach to be convincing. Therefore, ORS' s request must be rejected.

## X. ORDER

IT IS THEREFORE ORDERED THAT:

1. DESC's Application in this proceeding is approved as specifically modified herein.

2. The tariff sheet submitted as Hearing Exhibit 2 and entitled "Rider to Retail Rates – Demand Side Management Component" is approved as the form to be used in setting rates in the next annual proceeding to update that rider.

3. DESC may recover through the rate rider presented in Hearing Exhibit 2 its costs incurred in providing DSM programs, net lost revenues, and a shared savings incentive of 11.5% of the net benefits of the DSM programs.

4. DSM program costs and the shared savings incentive shall be recorded on the Company's books as a regulatory asset and amortized over a three-year period under the terms specified above.

5. The cost of capital that applies to unrecovered balances of DSM program costs shall be the Company's weighted average cost of debt.

6. Qualifying non-residential customers, as previously defined in Order Nos. 2010-472 and 2013-826, may opt of DESC's DSM programs in accordance with the terms and conditions set forth in Order No. 2013-826, with the exception that a non-residential customer must remain in the programs for a minimum of three years from the date the customer accepts the DSM incentives or other DSM benefits from the Company. Current opt-out notifications presently in effect for non-residential customers will remain in effect under the reauthorization of the rate rider.

7. DESC shall recalculate avoided costs and reevaluate the programs and measures approved in this proceeding in light of the avoided costs and avoided cost methodology approved in Docket

No. 2019-184-E. DESC shall file with the Commission a report (the "Avoided Cost Report") setting out the resulting avoided costs results and the changes, if any, to its DSM programs resulting from their reevaluation within 120 days of a final order being issued in Docket No. 2019-184-E.

8. DESC shall continue to file an annual report in January of each year as directed in Order No. 2010-472 and Order No. 2013-826, and will continue to do so in each subsequent January through the life of the DSM programs. The Company is directed to true up recovery of net lost revenue and shared savings incentive as required by the actual experience of operating the DSM programs and recompute on an annual basis the required revenue for recovery through the rate rider and the resulting rates based on the preceding program year beginning on December 1 and ending on November 30 and reflect those revenue requirements in this annual report. Consistent with the procedure presently established by Order No. 2012-300, as amended by Order No. 2013-147, parties wishing to intervene would be required to file petitions to intervene by February 28 of each year, and ORS and other interveners would be required to file comments on the Company's Application, if any, no later than April 1 of each year. The appropriate adjustment to the rate rider, determined after consideration of the Company's proposal and the parties' comments, would be made effective beginning with bills rendered on and after the first billing cycle in May.

9. The Company is authorized to modify, amend, terminate, or add any measure or program to its suite of programs without the requirement of seeking prior Commission approval; however, the Company shall timely report such changes to the Commission, and include the information in the Company's annual report to the Commission and ORS. No party other than the Company may seek a Commission order modifying, amending or terminating the Company's DSM programs, or the DSM rate rider until five years after the date of this Order. However, the Commission retains

the ability to review the terms and conditions of the DSM rate rider mechanism and associated matters at any time. The avoided costs set forth in the Avoided Cost Report shall be used for calculating shared savings until the issuance by the Commission of a final order approving a new suite of DSM programs for the Company after the five-year program stability period has expired.

10. The annual review process and timetable established by Order No. 2012-472 and amended by Order No. 2013-826 shall continue during this five-year period.

This Order shall remain in full force and effect until further Order of the Commission.

**IT IS HEREBY ORDERED.**

BY ORDER OF THE COMMISSION:

Comer H. Randall, Chairman

ATTEST:

__________________, Vice Chairman

(SEAL)